What is claimed is:

1. A method for performing a safety analysis in systems, in particular in a motor vehicle, the systems or the at least
5   one system comprising multiple components linked by communication relationships, the components and their communication relationships forming a functional structure of the systems or the at least one system, wherein errors are determined as a function of the
10 functional structure and these error dependencies are analyzed with respect to the functional structure.

2. The method as recited in Claim 1, wherein the error dependencies are tracked in the functional
15 structure, thereby generating error paths, with global effects of the errors being determined as the ends of the error paths.

3. The method as recited in Claim 1,
20 wherein the error dependencies are tracked in the functional structure, thereby generating error paths, with global effects of the errors being determined and weighted as the ends of the error paths.

25 4. The method as recited in Claim 3, wherein the global effects are weighted by determining at least one safety level.

5. The method as recited in Claim 1,
30 wherein in addition to the error dependencies with respect to the functional structure, errors which cause a malfunction of a component or a communication relationship are also determined.

35 6. The method as recited in Claim 2 or 3 and 5,

wherein malfunctions of a component or a communication relationship are assigned to the global effects.

7. The method as recited in one of the preceding claims, wherein measures for error detection and/or error control are determined.

8. The method as recited in one of the preceding claims, wherein the functional structure is expanded so that the global effects and/or the malfunction of a component or a communication relationship is/are taken into account.

9. The method as recited in one of the preceding claims, wherein the functional structure is expanded in such a way that measures for error detection and/or error control are included.

10. A method for achieving a preselectable safety level in systems, in particular in a motor vehicle, the systems or at least one system comprising multiple components linked by communication relationships, the components and their communication relationships forming a functional structure of the systems, errors being determined as a function of the functional structure and these error dependencies being analyzed with respect to the functional structure, including the following steps:

a) tracking the error dependencies in the functional structure and generating error paths and determining global effects of the errors,
b) weighting the global effects as a function of preselectable safety levels,
c) determining errors which cause a malfunction of a component or a communication relationship,
d) assigning the malfunction of a component or a

communication relationship to the global effects,

e) determining measures for error detection and/or error control,

f) determining the achievable safety level and comparing the safety level thus determined with the safety level to be achieved, and

g) restarting of the method at a) as a function of the comparison until achieving the safety level that is to be achieved.

11. The method as recited in Claim 10,
wherein documentation of the functional structure is performed between steps e) and f).

12. The method as recited in one of the preceding claims,
wherein the functional structure is represented as a CARTRONIC® functional structure using UML.

13. A device, in particular a computer system, for performing a method as recited in at least one of Claims 1 through 12.

14. A computer program which executes a method as recited in at least one of Claims 1 through 12 when run in a device as recited in Claim 13.

15. A computer program product, in particular a data medium having a computer program as recited in Claim 14, which executes a method as recited in at least one of the Claims 1 through 12 when installed in a device according to Claim 13.